301.38 BLACK STEM RUST

Federal Domestic Quarantine

- A. Pest. Black Stem Rust, Puccinia graminis.
- B. Regulated Areas.
 - 1. Quarantine Area.

The coterminous 48 states and the District of Columbia.

- 2. Protected Areas. Areas (state or county) designated by USDA that have eradicated rust-susceptible plants of the genera *Berberis*, *Mahoberberis*, and *Mahonia* under the cooperative federal-state eradication program. In addition, the state/county must employ personnel with responsibility for certificates for the interstate movement of regulated articles, and maintain and enforce an inspection program under which every plant nursery within the state/county is inspected at least once each year to ensure that they are free of rust-susceptible plants.
- a. The states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, West Virginia, Wisconsin, and Wyoming.
- b. The following counties in the State of Washington: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, Yakima.
- **C. Regulated Articles.** *Berberis, Mahoberberis*, and *Mahonia* plants, including seedlings, seeds, fruits, and other plant parts capable of propagation.
 - 1. All seed used to propagate plants of the genera Berberis, Mahoberberis, and Mahonia in protected areas, and all seed used to propagate plants of the genera Berberis, Mahoberberis, and Mahonia that are certified as rust-resistant for interstate movement into protected areas, must be produced at properties where a state inspector has verified that no wild or domesticated rust-susceptible plants are growing at or within one-half mile of the property.**

D Restrictions.

- **1. Prohibited Movement.** The following regulated articles are prohibited from moving interstate into or through any protected area:
- a. All Berberis seedlings and plants of less than 2 years' growth, and rust-susceptible Berberis plants, seeds, fruits and other plant parts capable of propagation.
- **b.** Rust-susceptible *Mahoberberis* and *Mahonia* plants, seedlings, seeds, fruits, and other plant parts capable of propagation.
- **2. Restricted Movement:** The following regulated articles may be moved interstate into or through a protected area with a certificate issued and attached.
- **a.** Plants of at least 2 years' growth, seeds, fruits, and other plant parts capable of propagation of the genus *Berberis* that are designated as rust-resistant.
- * Asterisk means prohibited entry into Canada.

b. Plants, seedlings, seeds, fruits, and other plant parts capable of propagation of the genera *Mahoberberis* and *Mahonia* that are designated as rust-resistant.

Notes: Certification is not required for California destinations.

The regulations require plants certified as resistant to black stem rust must be True to Type. For the purposes of this regulation, True to Type means "all plants in a shipment have the same vegetative characteristics. There is no evidence of hybridization on plants with at least 2 years growth in the genus *Berberis*. There is no evidence of hybridization on plants with 1 years growth in the genera *Mahonia* and *Mahoberberis*."

E. Rust-resistant Berberis, Mahoberberis and Mahonia Plants.

The following species and horticultural varieties of *Berberis*, *Mahoberberis*, and *Mahonia* have been determined to be black stem rust-resistant:

SCIENTIFIC NAME

Berberis aggregata x B. wilsoniae 'Pirate King'

- B. 'Amstelveen'
- B. aridocalida *
- B. beaniana *
- B. buxifolia
- B. buxifolia nana
- B. calliantha *
- B. candidula 'Amstelveen'
- B. candidula x B. verruculosa 'Amstelveen'
- R cavallieri
- B. chenaulti
- B. chenaulti. "Apricot Queen"
- B. circumserrata *
- B. concinna *
- B. coxii *
- B. darwini
- B. dasystachya *
- B. dubia *
- B. feddeana
- B. formosana *
- B. franchetiana *
- B. gagnepaini *
- B. gagnepaini 'Chenault'
- B. gilgiana *
- B. gladwynensis *
- B. gladwynensis 'William Penn'
- B. gyaliaca *
- B. heterophylla *
- B. horvathi *
- B. hybrido-gagnepaini *
- B. insignis
- B. integerrima 'Wallichs Purple'
- B. julianae
- B. julianae, "Nana"
- B. julianae, "Spring Glory"
- B. koreana *
- B. koreana x B. thunbergii hybrid Bailsel
- B. koreana x B. thunbergii hybrid Tara

- B. lempergiana *
- B. lepidifolia *
- B. linearifolia
- B. linearifolia var. Orange King
- B. lologensis
- B. lologensis 'Mystery Fire'
- B. manipurana *
- B. media 'Park Jewel'
- B. media "Red Jewel"
- B. mentorensis *
- B. pallens '
- B. poirettii 'BJG 073', 'MTA'
- B. potanini
- B. renton
- B. replicata
- B. sanguinea
- B. sargentiana
- B. sikkimensis *
- B. soulieana 'Claret Cascade'
- B. stenophylla
- B. stenophylla diversifolia
- B. stenophylla gracilis
- B. stenophylla irwini
- B. stenophylla nana compacta
- B. taliensis
- B. telomaica artisepala *
- B. thunbergii *
- B. thunbergii 'Antares'
- B. thunbergii argenteo marginata *
- B. thunbergii atropurpurea '
- B. thunbergii atropurpurea erecta *
- B. thunbergii atropurpurea erecta marshalli *
- B. thunbergii atropurpurea, "Golden Ring"*
- B. thunbergii atropurpurea 'Intermedia'
- B. thunbergii atropurpurea, "Knight Burgundy" '
- B. thunbergii atropurpurea nana '
- B. thunbergii atropurpurea, "Redbird"*
- B. thunbergii atropurpurea, "Rosy Glow"*
- B. thunbergii aurea
- B. thunbergii 'Aurea Nana'
- B. thunbergii, "Bagatelle"
- B. thunbergii 'Bailgreen' (Jade CarouselTM)
- B. thunbergii, "Bailone"*
- B. thunbergii 'Bailone' (Ruby Carousel®)
- B. thunbergii, "Bailtwo"
- B. thunbergii 'Bailtwo' (Burgandy Carousel®)
- B. thunbergii, "Bonanza Gold"
- B. thunbergii 'Concorde'
- B. thunbergii 'Crimson Pyamy'
- B. thunbergii 'Criruzam' Crimson Ruby™
- B. thunbergii, "Dwarf Jewell"*
- B. thunbergii erecta *
- B. thunbergii, "Globe"*
- * Asterisk means prohibited entry into Canada.

- B. thunbergii, "Golden"*
- B. thunbergii 'Golden Pygmy'
- B. thunbergii 'Green Carpet'
- B. thunbergii, "Harlequin"?
- B. thunbergii, "Helmond Pillar" *
- B. thunbergii, "Kabold"*
- B. thunbergii 'Lime Glow'
- B. thunbergii 'Lustre green'
- B. thunbergii maximowiczi *
- B. thunbergii 'Midruzam' Midnight Ruby™
- B. thunbergii minor *
- B. thunbergii 'Monlers'
- B. thunbergii, "Monomb"*
- B. thunbergii 'Monry'
- B. thunbergii 'Painter's Palette'
- B. thunbergii, "Pink Queen"
- B. thunbergii pluriflora *
- B. thunbergii 'Royal Burgandy'
- B. thunbergii 'Royal Cloak'
- B. thungergii, "Sparkle"*
 B. thunbergii, "Thornless"*
- B. thunbergii, "Upright Jewell"*
- B. thunbergii, "Variegata"*
- B. thunbergii xanthocarpa
- B. thunbergii x 'Bailsel' (Golden Carousel®)
- B. thunbergii x 'Tara' (Emerald Carousel®)
- B. triacanthophora
- B. triculosa
- B. verrusulosa *
- B. virgatorum *
- B. workingensis *
- B. xanthoxylon
- B. x carminea 'Pirate King'
- B. x frikartii 'Amstelveen'

Mahoberberis aqui-candidula M. aquifolium 'Smaragd'

- M. aqui-sargntiae
- M. miethkeana
- M. x 'Magic'

Mahonia amplectens

- M. aquifolium
- M. aquifolium atropurpurea
- M. aquifolium compacta
- M. aquifolium compacta, 'John Muir'
- M. aquifolium, "Donewell"
- M. aquifolium, "Kings Ranson"
- M. aquifolium, "Orangee Flame"
- M. aquifolium 'Undulata'
- M. aquifolium . "Winter Sun"
- M. "Arthur Menzies"
- M. bealei
- M. dictyota
- M. fortunei

Persons performing the inspections must be able to recognize rust-susceptible varieties of Berberis. Mahoberberis, and Mahonia. Inspectors must work side by side. 10 to 20 feet apart, and walk outward away from the property a distance of onehalf mile measured from the edge of the property, and observe all plants growing in the half-mile band. The distance between the inspectors may vary within this range depending upon the visibility of the plant growth. In areas with low brush and flat terrain, the inspectors may be the maximum distance of 20 feet apart if they can observe all plants growing within 10 feet of them. In areas of high plant growth or hilly terrain, the inspectors must be closer together due to limited or obstructed visibility. Inspectors must observe all plants growing between themselves and the mid-point of the distance between themselves and the next inspector. This process must be repeated so that the entire band, measured from the border of the property to the circumference of an imaginary circle having the property as its mid-point is visually inspected in this manner.

M. "Golden Abundance"

M. japonica

M. japonica x M. Iomariifolia 'Charity'

M. Iomarifolia

M. nervosa

M. pinnata

M. pinnata, "Ken Hartman"

M. piperiana

M. pumila

M. repens *

M. x media 'Charity'
M. x media 'Winter Sun'

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